# NEW DESCRIPTIONS 

# REVISION OF GENUS INDOTAXONUS MALAISE FROM INDIA (HYMENOPTERA, SYMPHYTA, TENTHREDINIDAE: ALLANTINAE) ${ }^{1}$ 

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#### Abstract

Genus Indotaxonus Malaise from India is revised. Five species are described and illustrated in a uniform pattern. Described as new are I. bicoloris, I. canaliculus and I. tajinderi, while I. unicolor Malaise is the first report from India. Treatment of each taxon includes synonymy (if any), detailed description, collection data, population variation (if any), and distribution. A key is provided for all the species described.


## Introduction

Genus Indotaxonus was described by Malaise in 1957 with Taxonus tricoloricornis Konow, as its type species. While shifting Taxonus tricoloricornis Konow, 1898 to Indotaxonus, Malaise also synonymised Allomorpha varicornis Cameron, 1899.

In this article we describe five species which include one that has already been reported, one as a first report and three as new to science. The holotypes of the new species are presently in our collections and will be deposited in the Indian Agricultural Research Institute (IARI), Pusa National Collections, New Delhi, India, after this work is published.

Abbreviations used are: LID = lower interocular distance, IDMO = inter-ocular distance at the level of median ocellus, EL = eye length, OOL = oculo-ocellar line, OCL = ocello-occipital line, $\mathrm{POL}=$ postocellar line, IATS $=$ inner apical tibial spur, OATS = outer apical tibial spur, MB = metabasitarsus, ICD = inter-cenchri distance, ITD = inter-tegular distance.

Genus Indotaxonus Malaise, 1957
Indotaxonus Malaise, 1957. Entomol. Tidskr. Arg. 78: 19-22.

Type species: Taxonus tricoloricornis Konow, 1898.

[^0]Diagnosis: Adult: Body fulvous with few black and pale yellow markings. Wings yellowish hyaline, hardly infumated towards apex, costa and stigma fulvous, venation blackish.

Antenna long and slender, longer than head and thorax combined, scape and pedicel longer than broad, segments 3 and 4 subequal in length, 4 or 5 apical joints strongly compressed; clypeus semicircularly incised with blunt and depressed lateral teeth; labrum flat, pentagonal; mandibles asymmetric, right one simple, left with a broad basal tooth; inner margins of eyes subparallel; malar space 1 x diameter of median ocellus; postocellar area longer than broad; lateral furrow deep and sharp; mesoscutellum pyramidally elevated; metabasitarsus longer than following tarsal joints combined, tarsal claw with a large subapical tooth in addition to an apical tooth and minute basal lobe. In front wings, anal cell with oblique cross vein; hind wings with two closed middle cell in female, none in male; anellan cell not petiolate.

Distribution: China, Burma; India.
Remarks: This genus is characterised by the males with the hind wings without closed middle cell and females with 2 closed middle cells. The anellan cell is not petiolate.

Key to the species of Genus Indotaxonus Malaise from India

1. Antenna bicoloured, apical segments black ....................... 2

- Antenna tricoloured, apical segments not black ................ 3

2. Wings entirely hyaline; lateral flecks on terga 3-6 present; head impunctate; mesoscutellum without a row of large, shallow punctures on its posterior border ..
I. bicoloris sp.nov.

- Apical halves of wings infuscated; lateral flecks on terga 3-6 missing; head with dense, minute, irregular punctures; meso - scutellum with a row of large, shallow punctures on its posterior border $\qquad$ I. unicolor Malaise, 1957

3. Median fovea deep, ditch -like and clearly though narrowly reaching median ocellus I. canaliculus sp. nov.

- Median fovea deep pit or ditch - like in its anterior half and posteriorly only broadly, shallowly reaching median ocellus

4. Mesonotal middle lobe entirely fuscoferruginous (no blackish spot); postocellar area longer than broad, ratio 4:3; antennal segments 3 and 4 equal; OOL:POL:OCL $=3: 2: 4$; metabasitarsus equal to following joints combined
I. tajinderisp. nov.

- Mesonotal middle lobe with some black markings atleast at its anterior margin; postocellar area longer than broad, ratio $3: 2$; antennal segment 3 shorter than 4 , ratio $6: 7$; OOL:POL:OCL $=3: 2: 3$; metabasitarsus longer than following joints combined, ratio 8:7
I. tricoloricornis (Konow, 1898)


## Indotaxonus bicoloris sp. nov.

(Figs. 2,5,11,15,19)
FEMALE: Colour: Body fuscoferruginous, black areas are: antennal segments 6-9; mandible tip; a spot between ocelli extending up to supra-antennal pit along antennal furrows; a streak along lateral furrows; a medial stripe on pronotum; extreme anterior margin of mesonotal middle lobe; lateral aspects of mesonotal lateral lobe; anterior aspects of mesepisternum and mesosternum; a median stripe on mesepimeron; metapleuron entirely; lateral flecks on terga 3-6 (more broad and large on 3 and 4). Legs fuscoferruginous. Wings hyaline; costa and basal 1/2 of stigma fulvous; rest of venation including subcosta black.

Structure: Average length 9 mm . Antenna long, 2.7X of head width; scape twice as long as its apical width; pedicel as long as its apical width; segments 3 and 4 almost equal; segments 6-9 strongly compressed; clypeus (Fig. 2) circularly incised up to $2 / 3$ of its medial length; labrum (Fig. 2 ) broader than long, ratio $3: 2$, with pointed anterior end; malar space of the diameter of median ocellus; head with postgenal carina; hind orbits carinated; LID:IDMO:EL = 7:8:5; frontal area below the level of eyes; supra-antennal tubercles and frontal ridges insignificant; median fovea in the form of a broad pit in its anterior half and posteriorly only shallowly
reaching median ocellus; post-, inter-and circumocellar furrows sharp and distinct; lateral furrows deep, distinct, parallel and ending just before the hypothetical hind margin of head; postocellar area longer than broad, ratio 3:2, with a faint medial longitudinal carina in its anterior half; head narrowing behind eyes; OOL:POL:OCL = 7:4:8; mesoscutellum pyramidally raised; appendage not carinate; ICD:ITD = 1:3; tarsal claw (Fig. 8) with a subapical tooth stronger but shorter than apical one and a distinct basal lobe; meta-basitarsus almost equal to following joints combined; metatibial spurs subequal in length; IATS:MB:OATS = 1.25:4:0.75. Lancet (Fig. 19) with 24 serrulae. Hypopygium as in Fig. 5.

Sculpture and pubescence: Head impunctate, shining; thorax impunctate except mesepisternum which bears dense, deep, distinct, confluent punctures on its convexity, surface shining with general oily lustre; abdomen impunctate subshining. Body covered with golden pubescence.
male: Average length 8 mm . Similar to female except the flecks on terga may be missing. Male genitalia: Penis valve (Fig. 11), gonoforceps (Fig. 15).

Holotype: Female, Nagaland: Pfutsero, 2100 m, 20 May, 1993.

Paratypes: Nagaland: 1 male, Wokha 1300 m, 15 September, 1992; 2 males, Vizho-Razho1600 m, 11 May, 1993; 1 female, 3 males, Zunheboto-1874 m, 14 May, 1993; 3 females, 8 males, Pfutsero-2100 m, 20 May, 1993.

Population variation: Entire flagellum may be black.

## Distribution: IndIA: Nagaland.

Diagnostic characters: Though I. bicoloris is allied to I. unicolor Malaise, it remains distinct from all other species dealt herewith on the basis of some significant characters such as: presence of lateral flecks on terga 3-6; characteristic shape of median fovea; entirely hyaline wings; absence of a row of large punctures on posteior border of mesoscutellum and impunctated head.

Etymology: The species name pertains to its
bicoloured antenna.
Indotaxonus unicolor Malaise, 1957
(Figs. 3, 6, 9, 20)
Indotaxonus unicolor Malaise, 1957. Entomol. Tidskr. Arg. 78, H-I. p. 22.
female: Colour: Body fuscoferruginous, dark brown to black areas are: 4 apical antennal segments; mandible tip; stripe along antennal furrow; narrow stripe surrounding each ocellus; stripe along lateral furrow; Y-shaped lateral spot on pronotum; stripe along dorsal and posterior margin of metapleuron; tip of sawsheath. Wings hyaline with infumated apices, more pronounced in forewing, costa a nd basal half of stigma fulvous, distal half of stigma and venation dark brown.

Structure: Average length 11 mm . Antenna $3 x$ head width, scape and pedicel twice as long as their apical widths; segment 3 and 4 equal in length, flagellum compressed; clypeus (Fig. 3) circularly incised up to $1 / 2$ of its medial length with subtriangular lateral teeth and wavy margin; labrum (Fig. 3) broader than long in ratio 3:2, flat with roundly pointed anterior margin; LID:IDMO:EL = 6:7:5; malar space half the diameter of median ocellus; frontal area almost at the level of eyes; median fovea in form of medial depression; postocellar area elevated, longer than broad in ratio $3: 2$, with faint indication of longitudinal carina on anterior $1 / 3$, post-, inter-, and circumocellar furrows sharp; lateral furrows parallel, deep and ending just before the hypothetical hind margin of head; OOL:POL:OCL $=3: 2: 4$; head narrowing behind eyes; mesoscutellum convex; appendage not carinate; ICD:ITD $=1.0: 3.5$; tarsal claw (Fig. 9) with a subapical tooth stronger but shorter than apical one and a distinct basal lobe; metabasitarsus longer than following joints combined, ratio 6:5; IATS:MB:OATS = 1.0:4.0:1.0. Lancet (Fig. 20) having 23 serrulae. Hypopygium as in Fig. 6.

Sculpture and pubescence: Head minutely and sparsely punctured; mesonotum and mesoscutellum densely and distinctly punctured; appendage polished; mesopleuron minutely
punctured with large scattered punctures along convexity; abdomen polished. Body covered with golden pubescence.
male: Not found.
Population variation: Not observed.
Holotype Depository: Female, NR, Stockholm.

Paratype Depository: 2 Males, NR, Stockholm.

Specimens examined: Uttar Pradesh: 2 females, Barkot-2000 m, 8 June, 1983. Meghalaya: 1 female, Smit-1500 m, 15 September, 1985; 1 female, Mawphlang - $1500 \mathrm{~m}, 17$ September, 1985.

Distribution: Burma; indiA: Meghalaya, Uttar Pradesh.

Diagnostic characters: This species is a first report from India. The specimens studied fall within Malaise's 1963 key for world genera and agrees well with the original description, by Malaise (1957). The species is unique in having antenna bicoloured; apical halves of wings infuscated; characteristic shape of median fovea; absence of lateral flecks on abdomen; mesoscutellum with a row of large punctures on its posterior border and head densely, minutely punctured. Because of the combination of these characters I. unicolor stands far apart from all other reported species of this genus.

Indotaxonus canaliculus sp. nov.
(Figs. 4, 12, 16, 21)
female: Colour: Body fuscoferruginous, whitish areas are: antennal segments 7-9. Black areas are: antennal segments 4-6; mandible tip; a spot between ocelli and covering most of frontal area; a streak along lateral furrows; ventral $2 / 3$ of pronotum except margins; extreme anterior aspects of mesonotal middle lobe; a broad medial spot covering most of mesonotal lateral lobe; anterior aspects of mesepisternum; mesosternum except anterior margin; anteroventral $1 / 2$ of mesepimeron; metapleuron entirely; lateral flecks on terga 2-7 (more large on terga 3-4). Legs fuscoferruginous. Wings faintly hyaline, transparent; costa and basal $1 / 2$ of stigma fulvous; rest of venation including subcosta black.


Frgs. 1-18. Species of the genus Indotaxomus Malaise: 1. Clypeus \& labrum of tajinderi; 2. Clypeus \& labrum of bicoloris;
3. Clypeus \& labrum of unicolor; 4. Hypopygium of canaliculus; 5. Hypopygium of bicoloris; 6. Hypopygium of unicolor; 7. Hypopygium of tajinderi; 8. Tarsal claw of tajinderi; 9. Tarsal claw of unicolor; 10. Tarsal claw of tricoloricornis; 11. Penis valve of bicoloris; 12. Penis valve of canaliculus; 13. Penis valve of tajinderi; 14. Penis valve of tricoloricornis; 15. Gonoforceps of bicoloris; 16. Gonoforceps of canaliculus; 17. Gonoforceps of tajinderi; 18. Gonoforceps of tricoloricornis

Structure: Length 12.5 mm . Antenna long, 2.8 x head width; scape twice as long as its apical width; pedicel as long as its apical width; segments 3 and 4 equal; segments 6-9 strongly compressed; clypeus (Fig. 1) subsquarely incised up to $1 / 2$ of its medial length; labrum (Fig. 1) broader than long, ratio
$3: 2$, with pointed anterior end; malar space 0.75 x diameter of median ocellus; head with postgenal carina; hind orbits carinated; LID:IDMO:EL = 6:7:4; frontal area below the level of eyes; supra-antennal tubercles moderate and confluent with similar roundly raised frontal ridges; median fovea in the form of a deep ditch, clearly though narrowly reaching median ocellus; post-, inter- and circumocellar furrows sharp and distinct; lateral furrows deep, distinct, parallel and ending just before the hypothetical hind margin of head; postocellar area almost flat, longer than broad, ratio $3: 2$ and with faint medial longitudinal carina in its anterior half; head slightly narrowing behind eyes; OOL:POL:OCL = 3:2:4; mesoscutellum convex with a median longitudinal carina more prominent on its anterior half; appendage not carinate; ICD:ITD $=1: 3$; tarsal claw with a subapical tooth stronger but shorter than apical one and a distinct basal lobe; metabasitarsus almost equal to following joints combined; metatibial spurs subequal in length; IATS:MB:OATS = 1.25:0.4:0.75. Lancet (Fig. 21) having 31 serrulae. Hypopygium as in Fig. 4.

Sculpture and pubescence: Head impunctate, shining; thorax impunctate except mesepisternum that bears dense, deep, distinct, confluenting punctures on its convexity, surface shining with an oily lusture; abdomen impunctate less shiny. Body covered with golden pubescence:
male: Length 9 mm . Similar to female except black flecks on terga missing. Male genitalia: Penis valve (Fig. 12), gonoforceps (Fig. 16).

Holotype: Female, Uttar Pradesh: Kalamunitop-2700 m, 24 June, 1991.

Paratypes: Uttar Pradesh: 3 females, 1 male, Mandal-2300 m, 15 June, 1987; 1 male, Kalamunitop-2700 m, 24 June, 1991.

Population variation: Not observed.
Distribution: IndiA: Uttar Pradesh.
Diagnostic characters: I. canaliculus is unique in having some remarkable characters such as tricoloured antenna; deep ditch-like median fovea clearly, though narrowly, reaching median ocellus; wings hyaline; apical four antennal segments strongly compressed and impunctated head. On the basis of these characters I. canaliculus is separable
from all the species dealt herewith.
Etymology: The species name pertains to the characteristic ditch-like median fovea.

Indotaxonus tajinderi sp.nov.
(Figs. 1,7,8,13,17,22)
female: Colour: Body fuscoferruginous; whitish areas are: apical $1 / 2$ of antennal segment 7; segments 8 and 9 entirely. Black areas are: antennal segments 4-6 and basal $1 / 2$ of segment 7 ; mandible tip; a spot between ocelli and a streak along lateral furrows; a median spot on anterior $1 / 2$ of pronotum; a broad medial spot covering most of mesonotal lateral lobe; extreme anterior aspect of mesepisternum; mesosternum entirely; a streak on anterodorsal margin of mesepimeron; lateral medial irregular flecks on terga 3-6 (larger on 3-4). Legs fuscoferruginous. Wings faintly hyaline, transparent; costa and basal $1 / 2$ of stigma fulvous; rest of venation including subcosta black.

Structure: Average length 10.5 mm . Antenna long, $2.8 x$ head width; scape twice as long as its apical width; pedicel as long as its apical width; segments 3 and 4 almost equal in length; apical 3 segments strongly compressed; clypeus (Fig. 1) subsquarely incised up to $1 / 2$ of its medial length; labrum (Fig. 1) broader than long, ratio 3:2, with pointed anterior end; malar space $0.75 x$ diameter of median ocellus; head with postgenal carina; hind orbits carinated; LID:IDMO:EL=4:4:3; frontal area below the level of eyes; supra-antennal tubercles and frontal ridges insignificant; median fovea in the form of a deep pit in its anterior half and posteriorly only shallowly and broadly reaching median ocellus; post -, inter- and cirumocellar furrows sharp and distinct; lateral furrows distinct, deep, parallel and ending just before the hypothetical hind margin of head; postocellar area almost flat, longer than broad, ratio $4: 3$, with a faint medial longitudinal carina in its anterior $1 / 2$; head narrowing behind eyes; OOL:POL:OCL = 3:2:4; mesoscutellum pyramidally raised; appendage not carinate; ICD:ITD = 1:3; tarsal claw (Fig. 8) with a subapical tooth stronger but shorter than apical one and a distinct basal lobe; metabasitarsus almost equal to
following joints combined; metatibial spurs subequal in length; IATS:MB:OATS $=1.25: 4: 0.75$. Lancet (Fig. 22) with 29 serrulae. Hypopygium as in Fig. 7.

Sculpture and pubescence: Head impunctate, shining; thorax impunctate except mesepisternum that bears few large, shallow, confluenting punctures on its convexity, surface shining with oily lustre; abdomen impunctate, shining. Body covered with golden pubescence.
male: Average length 9.0 mm . Similar to female except black flecks on terga missing. Male genitalia: Penis valve (Fig. 13), gonoforceps (Fig. 17).

Holotype: Female, Uttar Pradesh: Kalamunitop-2700 m, 26 June, 1991.

Paratypes: Uttar Pradesh: 1 male, Mandal2300 m, 15 June, 1987; 4 females, 5 males, Kalamunitop- 2700 m, 26 June, 1991 and 1 female, 21 June, 1993.

Population variation: Black spot on pronotum may be missing; black spot on metepisternum and metepimeron may be present.

Distribution: India: Uttar Pradesh.
Diagnostic characters: I. tajinderi comes close to I. tricoloricornis (Konow) on the basis of some broad key characters, but can be separated from the latter on account of the characteristic shape of the median fovea; postocellar area being broader than long as $4: 3$; OOL:POL:OCL $=3: 2: 4$; metabasitarsus equal to following joints combined and mesonotal middle lobe without blackish spot.

Etymology: The species is named after Mr. Tajinder P. Saini, working on sawfly taxonomy at Punjabi University, Patiala, India.

Indotaxonus tricoloricornis (Konow, 1898)
(Figs. 10,14,18,23)
Taxonus tricoloricornis Konow, 1898. Ent. Nachr. Vol. 24, p. 86.

Allomorpha varicornis Cameron, 1899. Mem. Philos. Soc. Manch. Vol. 43, p. 29-30.

Indotaxonus tricoloricornis Malaise, 1957. Entomol. Tidskr. Arg. 78, H-I, p.20-21.
female: Colour: Body fuscoferruginous, black


Figs. 19-23. Species of the genus Indotaxonus Malaise: 19. Lancet of bicoloris; 20. Lancet of unicolor; 21. Lancet of canaliculus; 22. Lancet of tajinderi; 23. Lancet of tricoloricornis.
areas are; antennal segments 4-6; mandible tip; supra-antennal pit; spot on median fovea; interocellar area; stripe along lateral furrow; lateral spot on pronotum; anterior margin of mesonotal middle lobe and large spot on lateral lobe; broad stripe dorsal to mesopleural suture; spot on anterior margin of mesepisternum; mesosternum; metapleuron; broad dorsolateral flecks on abdominal terga 2-6 (lateral on 3-4). Wings hyaline; costa and stigma fulvous; rest of venation piceous.

Structure: Average length 10 mm . Antenna 2.5 x head width, scape twice as long as its apical width; pedicel as long as its apical width; segments 3 and 4 subequal, ratio $6: 7 ; 4$ apical segments compressed; clypeus (Fig. 1) subsquarely incised up to $1 / 2$ of its medial length with subtriangular lateral teeth; labrum (Fig. 1) broader than long in ratio $3: 2$, flat and with pointed anterior end; LID:IDMO:EL $=6: 7: 5$; malar space equal to diameter of median ocellus; frontal area below the
level of eyes; median fovea distinct with deep pit at anterior end and posteriorly broadly, shallowly reaching median ocellus; post-, inter- and circumocellar furrows sharp; lateral furrows deep, distinct, parallel and ending abruptly well before the hypothetical hind margin of head; postocellar area elevated, longer than broad, ratio 3:2, with medial longitudinal carina; OOL:POL:OCL $=3: 2: 3$; head narrowing behind eyes; mesoscutellum pyramidally raised; appendage not carinate; ICD:ITD = 1:4; tarsal claw (Fig. 10) with a subapical tooth stronger but shorter than apical one and a distinct basal lobe; metabasitarsus longer than the following joints combined, ratio 8:7; IATS:MB:OATS $=2: 5: 1.25$. Lancet (Fig. 23) having 34 serrulae. Hypopygium as in Fig. 4.

Sculpture and pubescence: Head almost impunctate; mesonotum minutely punctured, still shining; mesoscutellum and metascutellum polished; convexity of mesepisternum almost rugose, its remaining area and mesepisternum minutely and sparsely punctured; abdomen polished. Body covered with golden pubescence.
male: Average length 8.0 mm . Similar to female except the absence of flecks on abdominal tergites. Male genitalia: Penis valve (Fig. 14), gonoforceps (Fig. 18).

Holotype Depository: Female, IAPL, Eberswalde.

Paratype Depository: 1 Male, IAPL, Eberswalde.

Specimens examined: Uttar Pradesh: 1 female, Barkot-2000 m, 8 June, 1983; 6 males, Barkot-2000 m, 28 June, 1992; 10 females, 100 males, Mandal-2700 m, 15-17 June, 1987; 25 males, Deer Park (Mandal)-2700 m, 27 June, 1989; 3 males, Mandal-2700 m, 25 June, 1992; 10 males, Chopta-3000 m, 19 June, 1987; 6 males, Chopta3000 m, 25 June, 1992; 1 female, Gobindghat-1800 m, 28 June, 1987; 2 females, Mukteshwar- 2700 m, 20 June, 1991; 7 females, 11 males, Binayak-2225 m, 22 June, 1991; 2 males, Kalamunitop-2700 m, 24 June, 1991; 2 males, Kalamunitop- 2700 m, 21 June, 1993; 3 females, 5 males, Kilbury- 2200 m, 22 June 1993. Himachal Pradesh: 36 females, 30
males, Kalatop-2800 m, 30 June - 2 July, 1986; 1 female, Shoja-3000 m, 10 May, 1992. West Bengal: 2 females, Pashok-2000 m, 22 May, 1987; 1 male, Darjeeling-2280 m, 7 May, 1993; 4 females, 3 males, Darjeeling-2280 m, 11 September, 1993. Siккim: 1 female, Gangtok-1700 m, 15 May, 1986; 1 male, Gangtok- 1700 m, 14 May, 1993; 1 female, 3 males, Namchi-1700 m, 16 May, 1993. Arunachal Pradesh: 14 females, Bomdila-2550 m, 2 May, 1989; 9 females, 27 males, Bomdila- 2550 m, 31 May- 2 June, 1989; 4 males, Bomdila- 2550 m, 25 June, 1993; 1 female, Dirang-1500 m, 29 May, 1993. Meghalaya: 3 females, Smit-1500 m, 17 May, 1989; 5 males, Elephanta Falls-1500 m, 19 May, 1989; 5 males, Elephanta Falls-1500 m, 19 May, 1989; 2 females, Happy Valley- $1500 \mathrm{~m}, 20$ May, 1989. Nagaland: 2 females, Zunheboto-1874 m, 14 May, 1993; 1 female, Satakha- 1500 m, 15 May, 1993.

Population variation: There is considerable variation in the black lateral flecks on abdomen in the females. Sometimes the flecks are small just on the border leaving a yellow abdomen in between but in some cases where flecks are quite prominent and large, the yellow colour of abdomen is left only
in the form of a line in the centre. Usually the number of these flecks is 6 , i.e. on terga 2-7. But sometimes 5 on 2-6, sometimes, 4 on 2-5 or 3-6. In case of males the apical abdominal tergites may be fulvous to almost black or entirely pale.

Distribution: IndIA: Uttar Pradesh, Himachal Pradesh, West Bengal, Sikkim, Arunachal Pradesh, Meghalaya, Nagaland.

Diagnostic characters: The specimens studied fall within Malaise's 1963 key for genera of the world and Malaise's 1957 key to the species of this genus. They also compare well with the available description by Konow (1898). I. tricoloricornis (Konow) is distinct from all other species on the basis of some remarkable characters such as the characteristic shape of median fovea; tricoloured antenna; hyaline wings; black marking on mesonotal middle lobe; metabasitarsus longer than following joints combined and postocellar area broader than long as $3: 2$, etc.

## Acknowledgements

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## A NEW SPECIES OF MEDINILLA GAUD. (MELASTOMATACEAE) FROM ARUNACHAL PRADESH, INDIA ${ }^{1}$

G. D. PAL ${ }^{2}$<br>(With a text-figure)

During plant exploration in the district of Lower Subansiri, Arunachal Pradesh, an interesting species of the genus Medinilla Gaud. was collected. A critical

[^1]study based on the regional herbarium specimens of allied species and literature on species of Medinilla Gaud. has proved it to be quite distinct from species so far known. It is described here.

Medinilla arunachalica sp. nov.
M. maingayi C.B. Clarke affinis, sed differt


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